



Exhibit A

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Cancel claim 15.

16. (Amended) The method in claim 20 [15], wherein said same material comprises copper.

17. (Amended) The method in claim 20 [15], wherein said barrier layer comprises one or more layers of Ti, TiN, Ta, and TaN.

18. (Amended) The method in claim 20 [15], wherein said barrier layer prevents elements within said connector from diffusing to said internal components.

19. (Amended) The method in claim 20 [15], further comprising polishing said integrated circuit structure such that said plug, said barrier layer and said exterior form a planar surface.

20. (Amended) A method of forming an integrated circuit structure comprising:
forming a via through an exterior of said integrated circuit structure to internal
components of said integrated circuit structure;
lining said via with a barrier layer;
forming a plug above said barrier layer, said plug and said internal components comprising
a same material; and
forming a solder ball connector on said plug, [The method in claim 15,] wherein said
connector is formed to be in direct contact with said plug.

21. (Amended) The method in claim 20 [15], further comprising forming a second barrier layer above said plug and forming a second plug above said second barrier layer, such that said second plug is in direct contact with said connector.

Add the following new claims:

22. The method in claim 20, wherein said solder ball connector is comprised of a lead/tin alloy.

23. A method of forming a metallurgical structure, comprising:
forming a first layer of copper on a substrate;
forming a barrier layer on said first layer of copper;
forming a second layer of copper formed on said barrier layer; and
forming a conductive structure that includes a given species, at least some of said given

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species diffusing from said conductive structure, said second layer of copper having a thickness sufficient to at least partially consume said species diffusing from said conductive structure, and to adhere to said conductive structure.

24. The method of claim 23, wherein said conductive structure comprises a solder ball.
25. The method of claim 24, wherein said given species comprises tin.
26. The method of claim 24, wherein said solder ball comprises a lead/tin alloy.
27. The method of claim 24, wherein said barrier layer is selected from the group consisting of Ti, TiN, Ta, Tan, and combinations thereof.
28. The method of claim 24, wherein said second conductive structure has an upper surface that is substantially coplanar with surrounding insulative structures.